



# *Data Management Program Status Update*

*December 2008*



## *Agenda*

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- Review Program Focus
- Review Recommendations to ITIB and CIO
- Processes Reviewed to Date
- Program Progress
- Time Commitment
- Discuss Opportunities
- Data Owners, Stewards and Program Stakeholders will meet in January

VEAP resources working in two areas:

### 1. Data Standardization

- Developed a Data Management Program Plan which defines four tracks of work: Data Standardization, Policy and Procedure, Organization and Governance and Infrastructure
- Reviewing a COV Data Standardization Process which defines how COV will standardize data
- Working with the Central Agency Data Stewards to create logical data models for the data that will be exchanged with the modern accounting systems
- Defining agency and enterprise roles and responsibilities as part of the Data Standardization Process
- Establishing the infrastructure for creating and managing data models

VEAP resources working in two areas:

### 2. Data Exchange Standards

- Researching industry XML standards for procurement, human resource and financial data exchanges
- Beginning the effort to map data requirements to XML industry standards
- VEAP recognizes that although XML is not new, it is not widely used across the Commonwealth today
  - Provide standards, training and support to the agency resources
  - Leverage our relationship with Virginia Interactive and agency partners like DSS and DGS who possess working knowledge of this technology
  - Gain experience and develop expertise quickly



## *Recommendations to ITIB and CIO*

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- VEAP recommends the Commonwealth of Virginia adopt Extensible Markup Language (XML) as the technical standard for all new data exchanges (interfaces). All new data exchanges, internal and external, unless granted an exception, should comply with the XML standard.
- VEAP recommends the Commonwealth of Virginia adopt and align to industry XML standards, whenever possible.
- VEAP is not putting forth any enterprise data standards for adoption, at this time.
  - Enterprise data standards should be based upon enterprise data requirements.
  - High level enterprise data requirements were identified in the VEAP Future State documents.
  - The high level data requirements for General Ledger and Accounts Payable will be reviewed, and defined in detail, as part of the Department of Transportation's (DOT) system modernization effort Design Phase.
  - Data standards will be established, after the detailed data requirements are finalized.



## *Recommendations to ITIB and CIO*

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- Other modules for DOT only  
(Purchasing, Accounts Receivable, Project Accounting and TALL)
  - VEAP will work with the Agency Data Stewards and the DOT team to finalize the detailed data requirements for the data that will be exchanged between central agency systems and DOT's new system
  - Enterprise XML data exchange standards will be established for these interfaces, after the DOT's Design Phase



## *Processes Reviewed to Date*

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### Procurement Data Exchange

- Reviewed Supplier, Requisition and Purchase Order processes
- Drafted logical data models
- Conduct review with procurement data owner and stewards in January 2009
- Presenting model to cross-functional group in February
- Being a modern enterprise solution, eVA is closely aligned with the commerce XML industry standard (c-XML)
  - eVA is currently integrated with Banner and PeopleSoft
  - Working towards integration with Oracle Financials
  - Mapping eVA's data exchanges against the c-XML standards to identify differences
  - Anticipating adoption of industry standard within the next three to six months for Supplier, Requisition and Purchase Order data



## *Processes Reviewed to Date*

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### Financial Data Exchange

- Created logical data model of Chart of Account structure
- Reviewing model with DOA and DPB December 2008
- Presenting model to cross-functional group in January 2009
- VEAP will work with DOA and DOT resources to add detail to the COA data model during the Design Phase
  - This effort will identify the detailed data requirements for the Chart of Account structure (data attributes, definitions, valid values, business rules, etc.).
- Data exchanges with DGS, DOA-payroll, DPB, DHRM, etc. will be defined in detail during the Design Phase.





## *Processes Reviewed to Date*

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### Human Resource Data Exchange

- Drafting a logical data model of employee identification and position data
- Reviewing model with DHRM resources in January 2009
- Presenting model to cross-functional team in February
- TALL data requirements will be defined, in detail, during the DOT's Design Phase
  - These requirements are the input for standardizing the TALL data and developing an XML data exchange.



## *Processes Reviewed to Date*

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### Budget Data Exchange

- The budget data exchange has not been reviewed.
- Data requirements for sharing budget execution and adjustment data between the new budget system and the new financial system need to be defined, in detail, by both project teams
- VEAP will work with DPB to standardize their data and develop an XML data exchange, once the data exchange requirements have been finalized

## Program Progress Summary

### ■ Data Standardization Work

Data Category	Sub-Model Name	Current Status	Next Step	Indicator
Vendor tables	Supplier	DGS reviewing	Data Steward review Feb-09	→
Agency Identification	Agency Structure	Drafted	DPB Review Dec-08 Data Steward review Jan-09	→
State Employee Identification	Employee	Drafted	Review with HR Jan-09 Data Steward Review Feb-09	→
Chart of Accounts	Chart of Accounts Structure	Drafted	DOA Review Dec-08 Data Steward Review Jan-09	→
Purchase including Commodity Codes	Ordering	DGS reviewing	Data Steward review Feb-09	→
Receiving Information	TBD	Not started	Identify Data Owners and facilitator	↔
Invoice Information	TBD	Not started	Identify Data Owners and facilitator	↔

→ Good Progress

↔ Need Data Owner Guidance

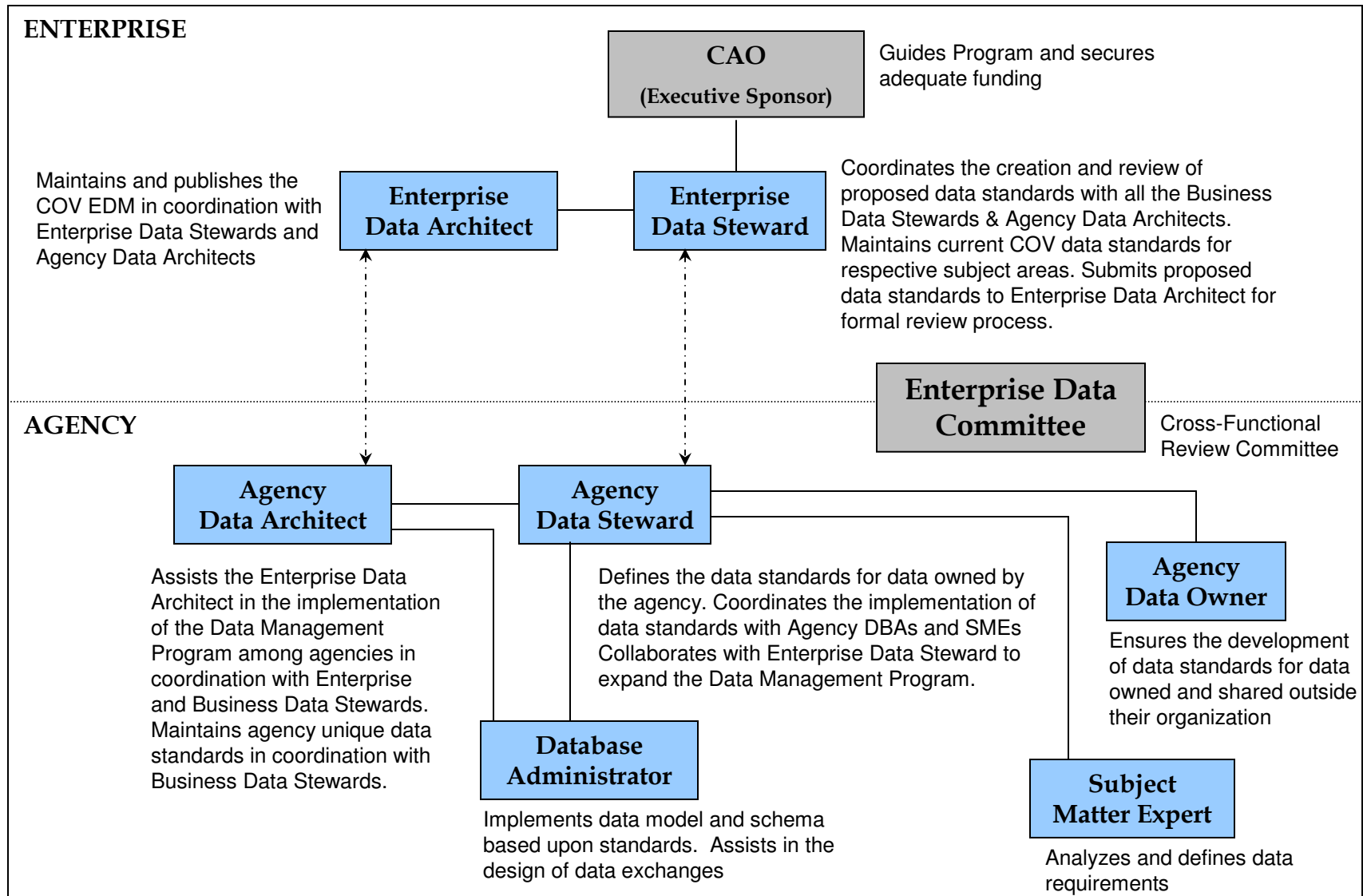
## Program Progress Summary

### ■ Policies and Procedures Work

Task	Status	Next Steps	Target Completion	Indicator
Data Standardization Process	In Review	<ul style="list-style-type: none"> <li>Document reviewed by Data Stewards</li> <li>Distribute to Data Owners and IT Participants for feedback</li> </ul>	Finalize by Jan-09	→
Metadata Requirements	Initial Review complete	<ul style="list-style-type: none"> <li>Document requirements in Appendix C of standardization process</li> <li>Review with broader audience</li> <li>Determine how metadata will be captured in modeling tool</li> </ul>	Appendix created Dec-08  Review Jan-09	→
Enterprise Abbreviations List	Not started	<ul style="list-style-type: none"> <li>Collecting examples across COV</li> <li>Create draft, based upon existing agency lists. Start in December 2008</li> </ul>	Version 1 available Feb-09	→
Enterprise Acronym List	Not started	<ul style="list-style-type: none"> <li>Collecting examples across COV</li> <li>Create draft, based upon existing agency lists. Start in December 2008</li> </ul>	Version 1 available Feb-09	→

*Availability of resources and expertise affects the progress*

# Data Management Roles





## *Program Progress Summary*

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### ■ Infrastructure Work

- ☐ Procured data modeling tool licenses (Embarcadero's ER/Studio v 7.6)
- ☐ Installed tool and learning nuances. DGS and VEAP have stand alone copies
- ☐ Informally evaluating the software tool to identify strengths and weaknesses

### ■ Organization / Governance Work

- ☐ Defined key roles and responsibilities as part of the Data Standardization Process
- ☐ RACI Diagrams assign process steps to roles
  - RACI Diagrams define who is Responsible, Accountable, Consulted and Informed
- ☐ Defining a Community of Interest (COI) for cross-functional reviews
- ☐ Transitioning a data modeler to the team



## *Program Priorities*

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- Support VDOT's system modernization effort and enterprise financial system implementation by:
  1. Collaborating with VDOT and central agencies to define the detailed data exchange requirements
  2. Standardizing the data to be exchanged
  3. Mapping the source data to an industry XML standard
  4. Supporting the development of standard XML data exchanges



## *Commitment to the Data Management Program*

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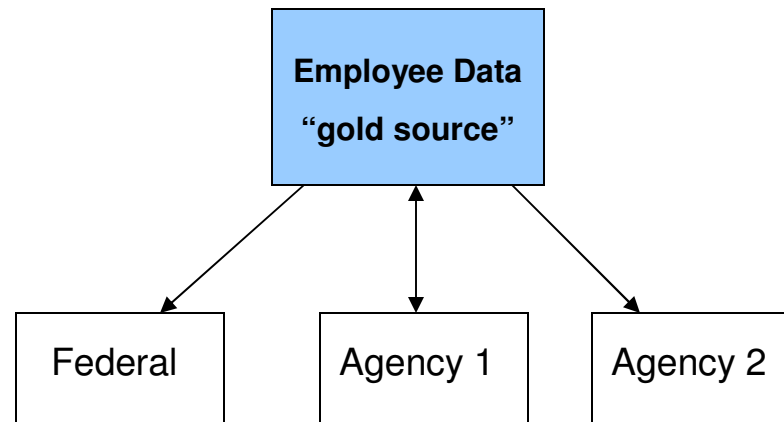
- Data management roles are ongoing
- Time commitment will vary based upon Program priorities
- Requesting the current level (2-4 hours per week) from the stewards
- Commitment from the Enterprise Data Committee participants (owners, stewards, architects) will vary based upon the data models requiring review
- Anticipating initial review of key data models during 1<sup>st</sup> quarter 2009
- Subsequent detailed reviews during the 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2009 after the detailed data exchange requirements have been finalized



## *Program Opportunities*

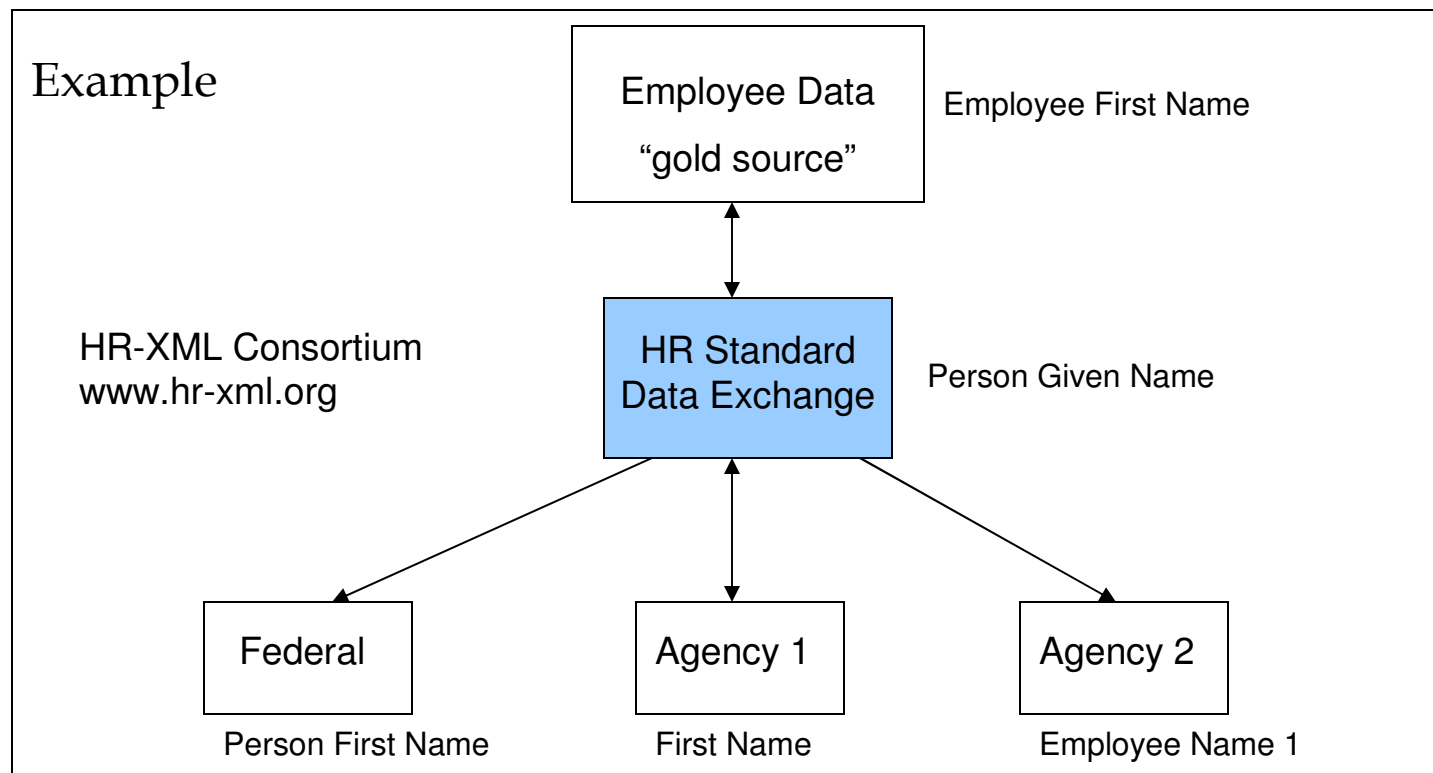
- Define the “gold source” for enterprise data
  - Identify the database and application which manages the “gold source”
  - Define CRUD matrix – who can Create, Read, Update and Delete the data
  - The CRUD matrix defines business rules for managing the data
  - Data Owners for this enterprise data must agree to exchange data according to standards

### Example



## Program Opportunities

- Exchange data independently from how it is stored
  - VEAP is researching industry standards for exchanging financial, HR and procurement data
  - Extensible Markup Language (XML) is the technology standard being used to exchange data between systems and organizations (federal, state, local levels)
  - By aligning to industry exchange standards our interfaces remain independent of the ever-changing application technologies





# *Business Opportunities*

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- The following opportunities were identified by the Data Stewards for discussion/prioritization with the Data Owners. These opportunities are outside the scope of the Data Management Program.
- Time, Attendance, Leave and Labor Distribution (TALL)
  - Multiple implementations exist today and many more agencies need this TALL functionality
  - TALL future state documents prepared in 2007 identify numerous opportunities for improving how the Commonwealth collects and uses TALL data
  - Enterprise requirements for TALL and policy recommendations should be finalized before enterprise standards can be developed
  - Finalized requirements could be leveraged in the short-term to evaluate existing solutions (e.g. a modified version of ABC's system) as viable solutions until such time as an enterprise solution can be implemented
- Procurement – Receiving and Invoicing functions
  - Receiving and Invoicing are business processes where data ownership transitions between DGS, Agencies and DOA. Defining enterprise business processes, where applicable, could result in the majority of agencies capturing and processing data in a consistent manner.
- Data Owner for Supplier
  - DGS' goal in the future is to de-couple the Supplier Registration process from eVA. The goal is to create an Enterprise Vendor Portal (ideally as part of Business One Stop)
  - DGS has defined a Supplier Data Model for review as a standard
  - Today Supplier (aka Vendor, Payee) is inconsistently managed across agencies
- Foreign Suppliers and Procurement
  - Several state agencies are procuring goods/services in foreign countries. An enterprise view for managing foreign supplier and foreign currency data needs to be developed.
  - Compliance with federal tax regulations for foreign suppliers should be addressed.



## *Next Steps*

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- Discuss communication vehicles needed for Data Owners and Stakeholders
  - Responsibility
    - Data Stewards update their Data Owners
    - VEAP updates VDOT and VITA stakeholders
  - Types of Communication
    - Status Updates
    - Data Issues
    - Business Opportunities
  - Methods and Frequency
    - Meetings
    - Email updates
- Discuss Involvement of IT Participants
- Follow-up steps for business opportunities